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STRUCTURE FILE UPDATES:      7 AUG 2007   HIGHEST RN 944239-85-4
DICTIONARY FILE UPDATES:    7 AUG 2007   HIGHEST RN 944239-85-4
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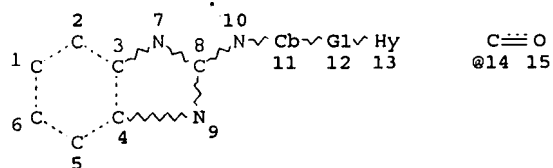
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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

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L8                               STR
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DEFAULT ELEVEL IS LIMITED
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40 ANSWERS

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FILE COVERS 1907 - 8 Aug 2007 VOL 147 ISS 7

FILE LAST UPDATED: 7 Aug 2007 (20070807/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=&gt; d bib abs hitrm fhitrstr l13

L13 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:409508 HCAPLUS

DN 142:463726

TI Preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors

IN Staehle, Wolfgang; Buchstaller, Hans-Peter; Jonczyk, Alfred; Rautenberg, Wilfried

PA Merck Patent G.m.b.H., Germany

SO PCT Int. Appl., 105 pp.

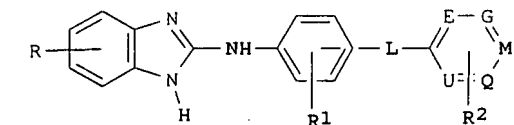
CODEN: PIXXD2

DT Patent

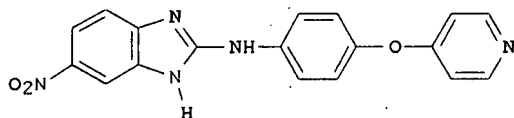
LA German

FAN.CNT 1

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DE--10349587	A1	20050525	2003DE-1049587	20031024 <--
AU2004285643	A1	20050512	2004AU-0285643	20041014 <--
CA---2543346	A1	20050512	2004CA-2543346	20041014 <--
EP---1675849	A1	20060705	2004EP-0765962	20041014 <--
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MX2006PA04405	A	20060614	2006MX-PA04405	20060420 <--
US2007066660	A1	20070322	2006US-0577033	20060424 <--
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OS MARPAT 142:463726				
GI				



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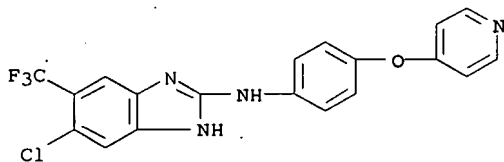


II

AB Title compds. I [R = (R1)m; R1 = (R1')p; R2 = (R2')q; m, p, q = 0-4; R1, R1' = Halo, OH, CN, etc.; L = CH2, CH2CH2, O, etc.; R2' = halo, OH, CO2H, etc.; E, G, M, Q, U = C or N atom with provisos] and their

pharmaceutically acceptable salts and formulations were prepared For example, condensation of 4-(4-isothiocyanatophenoxy)pyridine and 4-nitro-1,2-phenylenediamine afforded claimed benzimidazol II. In TIE-2 tyrosine kinase inhibition assays, 3-examples of compds. I exhibited IC50 values ranging from 5-40 x 10<sup>-7</sup> mol/L. Compds. I are claimed to be useful as tyrosine kinase inhibitors in the treatment of tumors.

- IT 851677-12-8P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-13-9P, [4-(Pyridin-4-yloxy)phenyl](6-trifluoromethyl-1H-benzimidazol-2-yl)amine 851677-14-0P, (6-Methyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-15-1P, (5-Chloro-4-methyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-16-2P, (4-Bromo-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-17-3P, (4-Bromo-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-18-4P, (5,6-Dimethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-19-5P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-20-8P, (5,6-Dichloro-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-21-9P, (5,6-Dichloro-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-22-0P, (5-Chloro-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-23-1P, (5-Chloro-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-24-2P, (4-Methyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-25-3P, (4-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-26-4P, (4-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-27-5P, (4,5-Dimethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-28-6P, (5-Chloro-6-methyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-29-7P, (5-Chloro-6-methyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-30-0P, [4,6-Bis(trifluoromethyl)-1H-benzimidazol-2-yl][4-(pyridin-4-yloxy)phenyl]amine 851677-31-1P, [4,6-Bis(trifluoromethyl)-1H-benzimidazol-2-yl][4-(pyridin-3-yloxy)phenyl]amine 851677-32-2P, [4-(Pyridin-3-yloxy)phenyl](6-trifluoromethyl-1H-benzimidazol-2-yl)amine 851677-33-3P, (6-Methyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-34-4P, (4,5-Dimethyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-35-5P, (5-Chloro-4-methyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-36-6P, (4-Methyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-37-7P, (5,6-Dimethyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-39-9P 851677-40-2P 851677-44-6P, (6-Nitro-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-45-7P, 2-[4-(Pyridin-4-yloxy)phenylamino]-3H-benzimidazole-5-carboxylic acid methyl ester 851677-48-0P, (4-Fluoro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-51-5P 851677-52-6P
- RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors)
- IT 851677-12-8P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine
- RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors)
- RN 851677-12-8 HCAPLUS
- CN 1H-Benzimidazol-2-amine, 5-chloro-N-[4-(4-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d bib abs hitstr 114 tot

L14 ANSWER 1 OF 4 HCAPLUS · COPYRIGHT 2007 ACS on STN  
AN 2005:259680 HCAPLUS  
DN 142:336356  
TI Preparation of benzimidazoles and imidazopyridines having affinity for  
melanocortin (MC), in particular MC4, receptors  
IN Poitout, Lydie; Brault, Valerie; Sackur, Carole; Roubert, Pierre; Plas,  
Pascale  
PA Fr.  
SO U.S. Pat. Appl. Publ., 213 pp., Cont.-in-part of U.S. Ser. No. 504,033.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 2

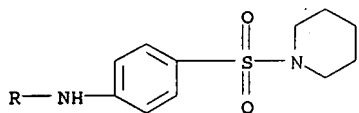
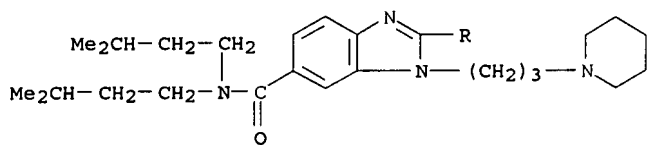
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US2005065179	A1	20050324	2004US-0915920	20040811
FR---2851563	A1	20040827	2003FR-0002320	20030226
FR---2851563	B1	20050422		
WO2004075823	A2	20040910	2004WO-FR00418	20040225
WO2004075823	A3	20041007		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI 2003FR-0002320	A	20030226		
2003US-0504033	A2	20030920		
2004WO-FR00418	W	20040225		
OS MARPAT 142:336356				
GI				

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein A = CH<sub>2</sub>, CO, (un)substituted COCH<sub>2</sub>; X = CH, N;  
R<sub>1</sub>, R<sub>2</sub> = independently H, alkyl optionally substituted by OH, alkenyl,  
etc.; or R<sub>1</sub>R<sub>2</sub> = (un)substituted hetero(bi)cycloalkyl; R<sub>3</sub> = alkyl, alkoxy,  
alkylthio, heteroaryl, (un)substituted hetero/cycloalkyl, aryl, etc.; R<sub>4</sub> =  
(CH<sub>2</sub>)<sub>s</sub>R<sub>5</sub>; R<sub>5</sub> = heterocycloalkyl, heteroaryl, etc.; s = 0-6] were prepared as  
melanocortin (MC), in particular MC<sub>4</sub>, receptor modulators (no data given).  
For example, II was prepared, in 2 steps, by amination of  
3-Fluoro-N,N-bis(3-methylbutyl)-4-nitrobenzamide (preparation given) with  
3-(piperidino)propylamine in CH<sub>3</sub>CN at reflux, followed by one-step  
hydrogenation/coupling with 4-acetylphenyl isothiocyanate. I are useful  
in the treatment of pathol. states and the diseases in which one or more  
melanocortin receptors are included such as pain, inflammatory conditions,  
etc.

IT 848577-67-3P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)  
(preparation of benzimidazoles and imidazopyridines having affinity for  
melanocortin (MC), in particular MC<sub>4</sub>, receptors)

RN 848577-67-3 HCAPLUS  
CN 1H-Benzimidazole-6-carboxamide, N,N-bis(3-methylbutyl)-1-[3-(1-  
piperidinyl)propyl]-2-[[4-(1-piperidinylsulfonyl)phenyl]amino]- (9CI) (CA  
INDEX NAME)



L14 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:817883 HCAPLUS

DN 141:332190

TI Preparation of fused azoles such as 2,5-disubstituted benzimidazoles, benzoxazoles and benzothiazoles as kinase inhibitors

IN Dipietro, Lucian V.; Harmange, Jean-Christophe; Askew, Benny C., Jr.; Elbaum, Daniel; Germain, Julie; Habgood, Gregory J.; Kim, Joseph L.; Patel, Vinod F.; Potashman, Michele; Van der Plas, Simon

PA Amgen Inc., USA

SO PCT Int. Appl., 289 pp.

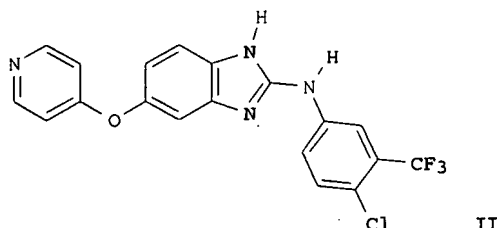
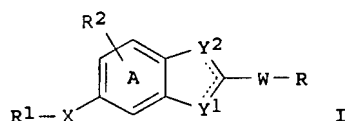
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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	AU2004223827	A1	20041007	2004AU-0223827	20040322
	CA---2518909	A1	20041007	2004CA-2518909	20040322
	EP---1638954	A1	20060329	2004EP-0758050	20040322
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	JP2006520805	T	20060914	2006JP-0507472	20040322
PRAI	2003US-456691P	P	20030321		
	2004US-0804915	A	20040319		
	2004WO-US08809	A	20040322		
OS	MARPAT 141:332190				
GI					



AB Title compds. I [W, X, Y1 and Y2 independently = O, S(O)<sub>n</sub> and NR<sub>3</sub>; ring A optionally contains a N atom at a non-fused, non-substituted ring position; n = 0-2; R = (un)substituted-aryl, -heterocyclyl, -fused heterocyclyl, etc.; R1 = (un)substituted-aryl, -arylalkyl, -heterocyclyl, etc.; R2 = H, halo, alkoxy, etc.; R3 = H or alkyl] are prepared and disclosed as having kinase inhibitory activity, such as VEGFR/KDR inhibitory activity. Thus, e.g., II was prepared by cyclocondensation of 4-(pyridin-4-yloxy)benzene-1,2-diamine with 1-chloro-4-isothiocyanato-2-trifluoromethylbenzene. In human umbilical vein endothelial cell proliferation assay, selected I inhibited VEGF-stimulated proliferation at a level below 100 nM. Accordingly, I would be useful in the prevention and treatment of angiogenesis related disorders, ophthalmol. conditions, proliferative diseases, inflammatory diseases, and other pathol. conditions as described in the specification.

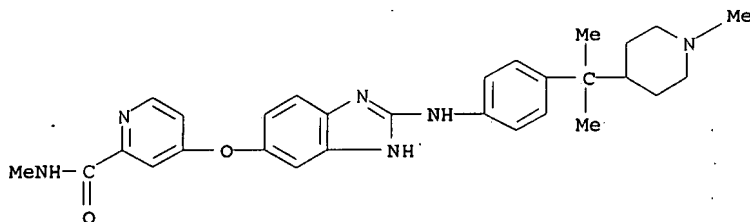
IT 769960-08-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of benzimidazole, benzoxazole and benzothiazole derivs. as kinase inhibitors)

RN 769960-08-9 HCAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[[2-[[4-[1-methyl-1-(1-methyl-4-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]-(9CI) (CA INDEX NAME)



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:513393 HCAPLUS

DN 141:71544

TI Preparation of substituted benzazoles as Raf kinase inhibitors

IN Amiri, Payman; Fantl, Wendy; Levine, Barry Haskell; Poon, Daniel J.;

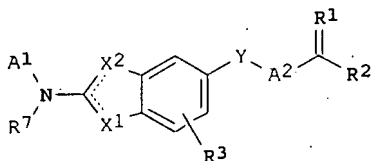
Ramurthy, Savithri; Renhowe, Paul A.; Subramanian, Sharadha; Sung, Leonard

PA USA

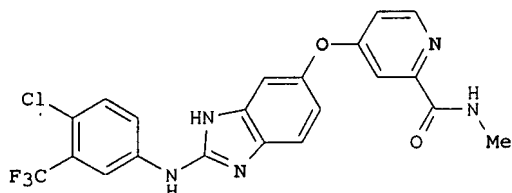
SO U.S. Pat. Appl. Publ., 476 pp., Cont.-in-part of U.S. Pat. Appl. 2004 87,626.

CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

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PI	US2004122237	A1	20040624	2003US-0675927	20030929
	US2004087626	A1	20040506	2003US-0405945	20030331
	US---7071216	B2	20060704		
	AU2004277405	A1	20050414	2004AU-0277405	20040929
	CA---2539748	A1	20050414	2004CA-2539748	20040929
	WO2005032548	A1	20050414	2004WO-US32161	20040929
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BR	2004014908	A	20061107	2004BR-0014908	20040929
CN---	1913884	A	20070214	CN 2004-80032677	20040929
JP	2007507428	T	20070329	2006JP-0528331	20040929
MX	2006PA03435	A	20060620	2006MX-PA03435	20060327
JP	2006193533	A	20060727	2006JP-0096143	20060330
IN	2006KN00838	A	20070413	2006IN-KN00838	20060405
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	2003US-0405945	A2	20030331		
	2003JP-0579810	A3	20030331		
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OS	MARPAT 141:71544				
GI					



I



II

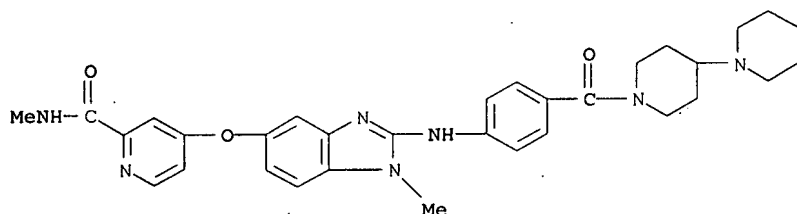
AB The title compds. I [wherein X1, X2 = N, NR4, O, S (with provisos); Y = O, S; A1 = (un)substituted alkyl, (hetero)cycloalkyl(alkyl), (hetero)aryl(alkyl), etc.; A2 = (un)substituted heteroaryl; R1 = O, H; R2 = NR5R6, OH; or CR1R2 = (un)substituted heterocycloalkyl, heteroaryl; R3 = H, halo, alkyl, alkoxy; R4 = H, OH, (di)alkylamino, alkyl; R5, R6 = H, (un)substituted (cyclo)alkyl, alkoxyalkyl, aminoalkyl, amidoalkyl, acyl, heterocyclyl, (hetero)aryl, etc.; or R5 and R6 are taken together to form (un)substituted heterocyclyl or heteroaryl; R7 = alkyl; and pharmaceutically acceptable salts, esters, or prodrugs] were prepared as Raf kinase inhibitors. Examples include synthetic methods and phys. data for 1400 compds., as well as descriptions of two Raf kinase bioassays. For instance, 4-amino-3-nitrophenol and (4-chloropyridin-2-yl)-N-methylcarboxamide were coupled using potassium bis(trimethylsilyl)amide

and K<sub>2</sub>CO<sub>3</sub> in DMF to give 4-[(4-amino-3-nitrophenyl)oxy]-N-methylpyridine-2-carboxamide. Pd-catalyzed hydrogenation, followed by cyclization with 4-chloro-3-(trifluoromethyl)benzenesothiocyanate in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide-HCl in THF provided the benzimidazole II. One thousand ninety-four compds. inhibited Raf kinase activity with IC<sub>50</sub> < 5 µM in a Raf/Mek filtration assay or a biotinylated Raf screen. Thus, I and their pharmaceutical compns., which may comprise at least one addnl. agent, are useful for the treatment of Raf kinase mediated disorders, such as cancer (no data).

IT 611220-90-7P 611221-14-8P 710353-65-4P,  
N-Methyl-4-[[2-[[3-[2-(piperidin-1-yl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]pyridine-2-carboxamide 710353-66-5P,  
N-Methyl-4-[[1-methyl-2-[[3-[2-(piperidin-1-yl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]pyridine-2-carboxamide 710353-67-6P,  
4-[[6-Methoxy-1-methyl-2-[[3-[2-(piperidin-1-yl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]-N-methylpyridine-2-carboxamide  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(Raf kinase inhibitor; preparation of substituted benzazoles as Raf kinase inhibitors for treatment of cancer)

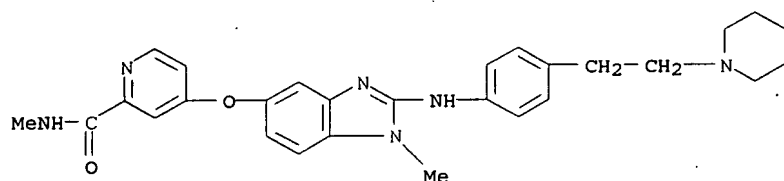
RN 611220-90-7 HCAPLUS

CN 2-Pyridinecarboxamide, 4-[[2-[[4-([1,4'-bipiperidin]-1'-ylcarbonyl)phenyl]amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI) (CA INDEX NAME)



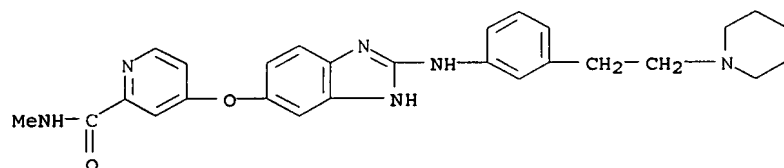
RN 611221-14-8 HCAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[[4-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



RN 710353-65-4 HCAPLUS

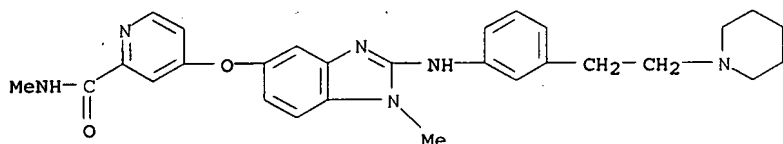
CN 2-Pyridinecarboxamide, N-methyl-4-[[2-[[3-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



RN 710353-66-5 HCAPLUS

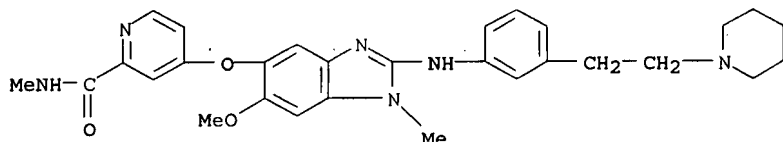
CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[[3-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)





RN 710353-67-6 HCAPLUS

CN 2-Pyridinecarboxamide, 4-[[6-methoxy-1-methyl-2-[[3-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI)  
(CA INDEX NAME)



L14 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:796477 HCAPLUS

DN 139:307759

TI Preparation of substituted benzazoles as Raf kinase inhibitors

IN Renhowe, Paul A.; Ramurthy, Savithri; Amiri, Payman; Levine, Barry  
Haskell; Poon, Daniel J.; Subramanian, Sharadha; Sung, Leonard; Fantl,  
Wendy

PA Chiron Corporation, USA

SO PCT Int. Appl., 259 pp.

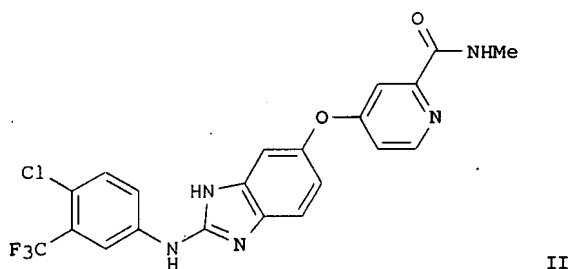
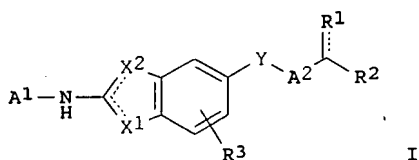
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA---2480638	A1	20031009	2003CA-2480638	20030331
AU2003226211	A1	20031013	2003AU-0226211	20030331
EP---1499311	A1	20050126	2003EP-0745683	20030331
R:				
AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR2003008854	A	20050222	2003BR-0008854	20030331
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JP2005529089	T	20050929	2003JP-0579810	20030331
NZ---535985	A	20070427	2003NZ-0535985	20030331
IN2004KN01433	A	20051230	2004IN-KN01433	20040927
MX2004PA09541	A	20050125	2004MX-PA09541	20040929
NO2004004617	A	20041228	2004NO-0004617	20041026
ZA-200408386	A	20060531	2004ZA-0008386	20060308
JP2006193533	A	20060727	2006JP-0096143	20060330
PRAI 2002US-369066P	P	20020329		
2003JP-0579810	A3	20030331		
2003WO-US10117	W	20030331		
OS MARPAT 139:307759				
GI				



AB The title compds. [I; X1, X2 = N, NR4, O, S (with the provisos); Y = O, S; A1 = (un)substituted alkyl, cycloalkyl, aryl, etc.; A2 = (un)substituted heteroaryl; R1 = O, H, and R2 = NR5R6, OH; or CR1R2 = (un)substituted heterocycloalkyl, heteroaryl; R3 = H, halo, alkyl, alkoxy; R4 = H, OH, (di)alkylamino, alkyl; R5, R6 = H, (un)substituted alkyl, alkoxyalkyl, etc.; or R5 and R6 are taken together to form (un)substituted heterocyclyl or heteroaryl], useful for inhibition of Raf kinase activity in a human or animal subject, were prepared. E.g., a 3-step synthesis of the benzimidazole II (starting from 4-amino-3-nitrophenol and (4-chloropyridin-2-yl)-N-methylcarboxamide), was given. The compds. of examples 1-1094 showed a Raf kinase inhibitory activity at an IC50 of less than 5  $\mu$ M. A composition comprising the compound I is claimed. The new compds. compns. may be used either alone or in combination with at least one addnl. agent for the treatment of a Raf kinase mediated disorder, such as cancer.

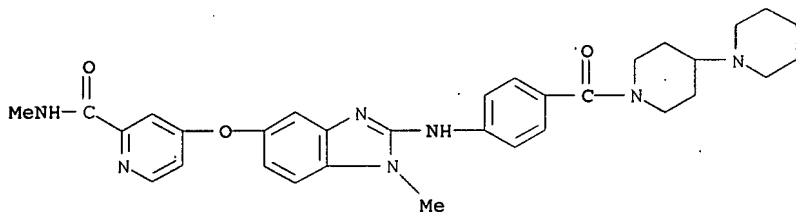
IT 611220-90-7P 611221-14-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted benzazoles as Raf kinase inhibitors)

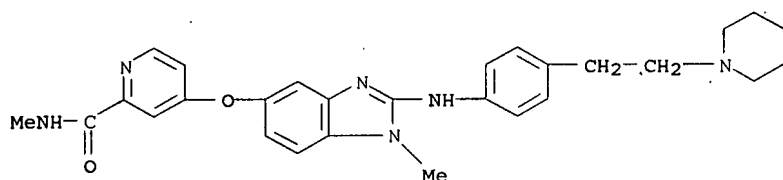
RN 611220-90-7 HCAPLUS

CN 2-Pyridinecarboxamide, 4-[[2-[[4-([1,4'-bipiperidin]-1'-ylcarbonyl)phenyl]amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI) (CA INDEX NAME)



RN 611221-14-8 HCAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[[4-[2-(1-piperidinylethyl)phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => => b uspatall

FILE 'USPATFULL' ENTERED AT 18:03:53 ON 08 AUG 2007  
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 18:03:53 ON 08 AUG 2007  
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitrn fhitr 117

L17 ANSWER 1 OF 1 USPATFULL on STN

AN 2007:76306 USPATFULL  
TI Benzimidazolyl derivatives  
IN Stahle, Wolfgang, Ingelheim, GERMANY, FEDERAL REPUBLIC OF  
Buchstaller, Hans-Peter, Griesheim, GERMANY, FEDERAL REPUBLIC OF  
Jonczyk, Alfred, Darmstadt, GERMANY, FEDERAL REPUBLIC OF  
Rautenberg, Wilfried, Reinheim, GERMANY, FEDERAL REPUBLIC OF  
PA Merck Patent GmbH, DARMSTADT, GERMANY, FEDERAL REPUBLIC OF, 64293  
(non-U.S. corporation)  
PI US-20070066660 A1 20070322 <--  
AI 2004US-000577033 A1 20041014 (10)  
2004WO-EP00011550 20041014  
20060424 PCT 371 date  
PRAI 2003DE-0010349587 20031024 <--  
DT Utility  
FS APPLICATION  
LREP HELLER EHRMAN LLP, 1717 RHODE ISLAND AVE, NW, WASHINGTON, DC,  
20036-3001, US  
CLMN Number of Claims: 36  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 2276

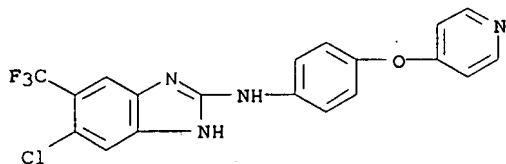
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to the novel compounds of formula (I) wherein  
R.sup.1, R.sup.1, L, E, G, M, Q, U, R.sup.2, m, p and q are defined as  
in claim 1. The novel compounds are tyrosinkinase inhibitors, especially  
TIE-2 inhibitors, and Raf kinase inhibitors and can be used in the  
treatment of tumors. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 851677-12-8P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-  
(pyridin-4-yloxy)phenyl]amine 851677-13-9P,  
[4-(Pyridin-4-yloxy)phenyl] (6-trifluoromethyl-1H-benzimidazol-2-yl)amine  
851677-14-0P, (6-Methyl-1H-benzimidazol-2-yl) [4-(pyridin-4-  
yloxy)phenyl]amine 851677-15-1P, (5-Chloro-4-methyl-1H-  
benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-16-2P  
, (4-Bromo-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-4-  
yloxy)phenyl]amine 851677-17-3P, (4-Bromo-6-trifluoromethyl-1H-  
benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-18-4P  
, (5,6-Dimethyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine  
851677-19-5P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-  
(pyridin-3-yloxy)phenyl]amine 851677-20-8P,  
(5,6-Dichloro-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine  
851677-21-9P, (5,6-Dichloro-1H-benzimidazol-2-yl) [4-(pyridin-3-  
yloxy)phenyl]amine 851677-22-0P, (5-Chloro-1H-benzimidazol-2-  
yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-23-1P,  
(5-Chloro-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine.  
851677-24-2P, (4-Methyl-1H-benzimidazol-2-yl) [4-(pyridin-3-  
yloxy)phenyl]amine 851677-25-3P, (4-Chloro-6-trifluoromethyl-1H-  
benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-26-4P

, (4-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-27-5P, (4,5-Dimethyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-28-6P, (5-Chloro-6-methyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-29-7P, (5-Chloro-6-methyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-30-0P, [4,6-Bis(trifluoromethyl)-1H-benzimidazol-2-yl] [4-(pyridin-4-yloxy)phenyl]amine 851677-31-1P, [4,6-Bis(trifluoromethyl)-1H-benzimidazol-2-yl] [4-(pyridin-3-yloxy)phenyl]amine 851677-32-2P, [4-(Pyridin-3-yloxy)phenyl] (6-trifluoromethyl-1H-benzimidazol-2-yl)amine 851677-33-3P, (6-Methyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-34-4P, (4,5-Dimethyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-35-5P, (5-Chloro-4-methyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-36-6P, (4-Methyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-37-7P, (5,6-Dimethyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-39-9P 851677-40-2P 851677-44-6P, (6-Nitro-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-45-7P, 2-[4-(Pyridin-4-yloxy)phenylamino]-3H-benzimidazole-5-carboxylic acid methyl ester 851677-48-0P, (4-Fluoro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-51-5P 851677-52-6P  
(preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors)  
IT 851677-12-8P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine  
(preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors)  
RN 851677-12-8 USPATFULL  
CN 1H-Benzimidazol-2-amine, 5-chloro-N-[4-(4-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



=> d bib abs hitstr l18 tot

L18 ANSWER 1 OF 5 USPATFULL on STN  
AN 2005:75878 USPATFULL  
TI Novel derivatives of benzimidazole and imidazo-pyridine and their use as medicaments  
IN Poitout, Lydie, Le Kremlin Bicetre, FRANCE  
Brault, Valerie, Saint-Arnoult-En-Yvelines, FRANCE  
Sackur, Carole, Paris, FRANCE  
Roubert, Pierre, Paris, FRANCE  
Plas, Pascale, Chatillon, FRANCE  
PI US-20050065179 A1 20050324  
AI 2004US-000915920 A1 20040811 (10)  
RLI Continuation-in-part of Ser. No. US 504033, PENDING A 371 of International Ser. No. 2004WO-FR00000418, filed on 25 Feb.2004, UNKNOWN  
PRAI 2003FR-0000002320 20030226  
DT Utility  
FS APPLICATION  
LREP MUSERLIAN, LUCAS AND MERCANTI, LLP, 475 PARK AVENUE SOUTH, 15TH FLOOR, NEW YORK, NY, 10016  
CLMN Number of Claims: 43  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 4046  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB A compound of the formula ##STR1##

wherein the substituents are as defined in the specification and pharmaceutical salts thereof having a good affinity for sub-types of melanocortin receptors making them useful for treating diseases in which

such receptors are included such as pain, inflammatory conditions, etc.

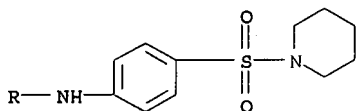
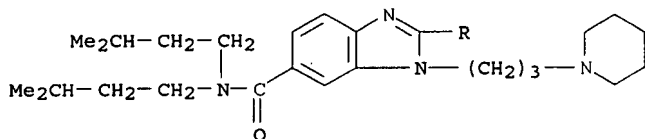
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 848577-67-3P

(preparation of benzimidazoles and imidazopyridines having affinity for melanocortin (MC), in particular MC4, receptors)

RN 848577-67-3 USPATFULL

CN 1H-Benzimidazole-6-carboxamide, N,N-bis(3-methylbutyl)-1-[3-(1-piperidinyl)propyl]-2-[[4-(1-piperidinylsulfonyl)phenyl]amino]- (9CI)  
(CA INDEX NAME)



L18 ANSWER 2 OF 5 USPATFULL on STN

AN 2004:268349 USPATFULL

TI Heterocyclic compounds and methods of use

IN Di Pietro, Lucian V., Gloucester, MA, UNITED STATES

Harmange, Jean-Christophe, Andover, MA, UNITED STATES

Askew, Benny C., JR., Newbury Park, CA, UNITED STATES

Elbaum, Daniel, Newton, MA, UNITED STATES

Germain, Julie, Medford, MA, UNITED STATES

Habgood, Gregory J., Merrimac, MA, UNITED STATES

Kim, Joseph L., Wayland, MA, UNITED STATES

Patel, Vinod F., Acton, MA, UNITED STATES

Potashman, Michele, Cambridge, MA, UNITED STATES

van der Plas, Simon, Medford, MA, UNITED STATES

PI US-20040209892 A1 20041021

AI 2004US-000804915 A1 20040319 (10)

PRAI 2003US-000456691P 20030321 (60)

DT Utility

FS APPLICATION

LREP AMGEN INC., U.S. Patent Operations/JWB, Dept. 4300, M/S 27-4-A, One

Amgen Center Drive, Thousand Oaks, CA, 91320-1799

CLMN Number of Claims: 60

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 6639

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Selected compounds are effective for prophylaxis and treatment of diseases, such as angiogenesis mediated diseases. The invention encompasses novel compounds, analogs, prodrugs and pharmaceutically acceptable salts thereof, pharmaceutical compositions and methods for prophylaxis and treatment of diseases and other maladies or conditions involving, cancer and the like. The subject invention also relates to processes for making such compounds as well as to intermediates useful in such processes.

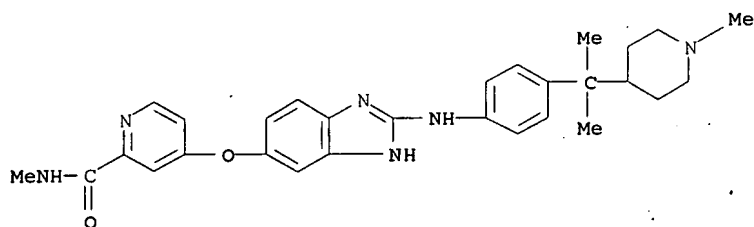
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 769960-08-9P

(drug candidate; preparation of benzimidazole, benzoxazole and benzothiazole derivs. as kinase inhibitors)

RN 769960-08-9 USPATFULL

CN 2-Pyridinecarboxamide, N-methyl-4-[[2-[[4-[1-methyl-1-(1-methyl-4-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI)  
(CA INDEX NAME)



L18 ANSWER 3 OF 5 USPATFULL on STN

AN 2004:159433 USPATFULL

TI Substituted benzazoles and methods of their use as inhibitors of Raf kinase

IN Amiri, Payman, Walnut Creek, CA, UNITED STATES  
 Fantl, Wendy, San Francisco, CA, UNITED STATES  
 Levine, Barry Haskell, Lafayette, CA, UNITED STATES  
 Poon, Daniel J., Oakland, CA, UNITED STATES  
 Ramurthy, Savithri, Walnut Creek, CA, UNITED STATES  
 Renhowe, Paul A., Danville, CA, UNITED STATES  
 Subramanian, Sharadha, San Ramon, CA, UNITED STATES  
 Sung, Leonard, Irvine, CA, UNITED STATES

PI US-20040122237 A1 20040624

AI 2003US-000675927 A1 20030929 (10)

RLI Continuation-in-part of Ser. No. 2003US-000405945, filed on 31 Mar 2003, PENDING

PRAI 2002US-000369066P 20020329 (60)

DT Utility

FS APPLICATION

LREP Chiron Corporation, Intellectual Property - R440, P.O. Box 8097, Emeryville, CA, 94662-8097

CLMN Number of Claims: 86

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 9816

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

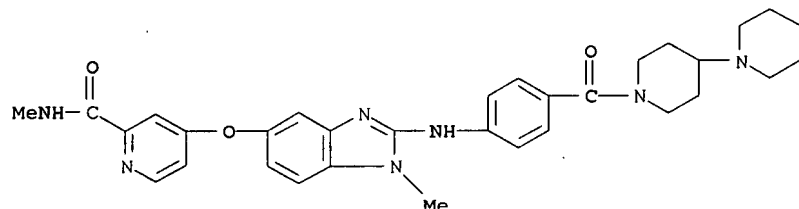
AB New substituted benzazole compounds, compositions and methods of inhibition of Raf kinase activity in a human or animal subject are provided. The new compounds compositions may be used either alone or in combination with at least one additional agent for the treatment of a Raf kinase mediated disorder, such as cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 611220-90-7P 611221-14-8P 710353-65-4P,  
 N-Methyl-4-[[2-[[3-(2-(piperidin-1-yl)ethyl)phenyl]amino]-1H-benzimidazol-5-yl]oxy]pyridine-2-carboxamide 710353-66-5P,  
 N-Methyl-4-[[1-methyl-2-[[3-(2-(piperidin-1-yl)ethyl)phenyl]amino]-1H-benzimidazol-5-yl]oxy]pyridine-2-carboxamide. 710353-67-6P,  
 4-[[6-Methoxy-1-methyl-2-[[3-(2-(piperidin-1-yl)ethyl)phenyl]amino]-1H-benzimidazol-5-yl]oxy]-N-methylpyridine-2-carboxamide  
 (Raf kinase inhibitor; preparation of substituted benzazoles as Raf kinase inhibitors for treatment of cancer)

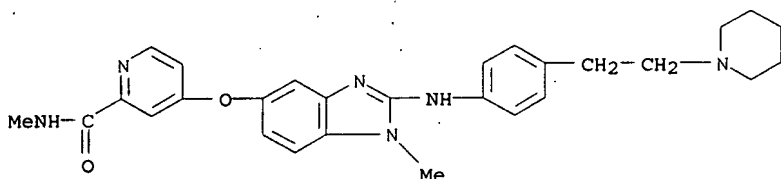
RN 611220-90-7 USPATFULL

CN 2-Pyridinecarboxamide, 4-[[2-[[4-([1,4'-bipiperidin]-1'-yl)carbonyl]phenyl]amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI) (CA INDEX NAME)



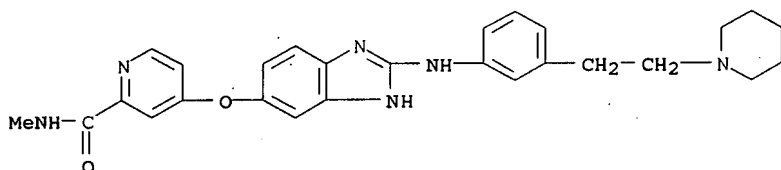
RN 611221-14-8 USPATFULL

CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[[4-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



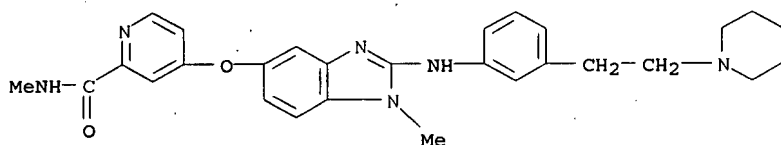
RN 710353-65-4 USPATFULL

CN 2-Pyridinecarboxamide, N-methyl-4-[[2-[[3-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



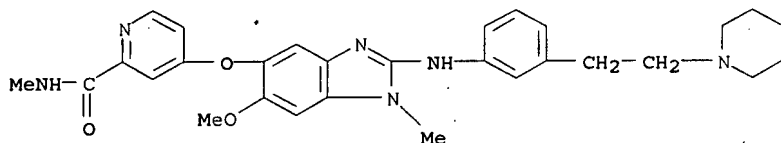
RN 710353-66-5 USPATFULL

CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[[3-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



RN 710353-67-6 USPATFULL

CN 2-Pyridinecarboxamide, 4-[[6-methoxy-1-methyl-2-[[3-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI) (CA INDEX NAME)



L18 ANSWER 4 OF 5 USPATFULL on STN

AN 2004:114780 USPATFULL

TI Substituted benz-azoles and methods of their use as inhibitors of Raf kinase

IN Renhowe, Paul A., Danville, CA, UNITED STATES  
 Ramurthy, Savithri, Walnut Creek, CA, UNITED STATES  
 Amiri, Payman, Lafayette, CA, UNITED STATES  
 Levine, Barry Haskell, Lafayette, CA, UNITED STATES  
 Poon, Daniel J., Oakland, CA, UNITED STATES  
 Subramanian, Skaradha, San Ramon, CA, UNITED STATES  
 Sung, Leonard, Irvine, CA, UNITED STATES  
 Fantl, Wendy, San Francisco, CA, UNITED STATES

PI US-20040087626 A1 20040506

US-----7071216 B2 20060704

AI 2003US-000405945 A1 20030331 (10)

PRAI 2002US-000369066P 20020329 (60)  
 DT Utility  
 FS APPLICATION  
 LREP CHIRON CORPORATION, Intellectual Property-R440, P.O. Box 8097,  
 Emeryville, CA, 94662-8097  
 CLMN Number of Claims: 86  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 7855

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New substituted benz-azole compounds, compositions and methods of inhibition of Raf kinase activity in a human or animal subject are provided. The new compounds compositions may be used either alone or in combination with at least one additional agent for the treatment of a Raf kinase mediated disorder, such as cancer.

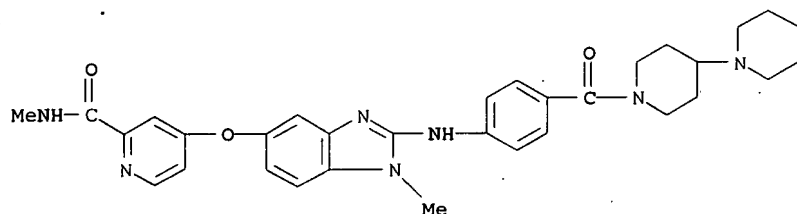
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 611220-90-7P 611221-14-8P

(preparation of substituted benzazoles as Raf kinase inhibitors)

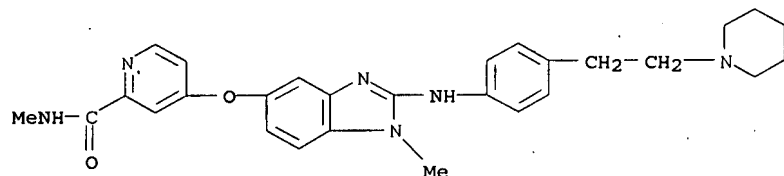
RN 611220-90-7 USPATFULL

CN 2-Pyridinecarboxamide, 4-[[2-[[4-([1,4'-bipiperidin]-1'-ylcarbonyl)phenyl]amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl-(9CI) (CA INDEX NAME)



RN 611221-14-8 USPATFULL

CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[[4-([2-(1-piperidinylethyl)phenyl]amino)-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



L18 ANSWER 5 OF 5 USPAT2 on STN

AN 2004:114780 USPAT2

TI Substituted benz-azoles and methods of their use as inhibitors of Raf kinase

IN Renhowe, Paul A., Danville, CA, UNITED STATES  
 Ramurthy, Savithri, Walnut Creek, CA, UNITED STATES  
 Amiri, Payman, Walnut Creek, CA, UNITED STATES  
 Levine, Barry Haskell, Lafayette, CA, UNITED STATES  
 Poon, Daniel J., Oakland, CA, UNITED STATES  
 Subramanian, Sharadha, San Ramon, CA, UNITED STATES  
 Sung, Leonard, Irvine, CA, UNITED STATES  
 Fantl, Wendy, San Francisco, CA, UNITED STATES  
 Hansen, Teresa, Danville, CA, UNITED STATES  
 McBride, Christopher, Oakland, CA, UNITED STATES  
 Shafer, Cynthia M., El Sobrante, CA, UNITED STATES

PA Chiron Corporation, Emeryville, CA, UNITED STATES (U.S. corporation)

PI US-----7071216 B2 20060704

AI 2003US-000405945 20030331 (10)

PRAI 2002US-000369066P 20020329 (60)

DT Utility

FS GRANTED



EXNAM Primary Examiner: Stockton, Laura L.  
 LREP Shelton, Dennis K., Suh, Young J., Harbin, Alisa A.  
 CLMN Number of Claims: 66  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 6608

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB New substituted benz-azole compounds, compositions and methods of inhibition of Raf kinase activity in a human or animal subject are provided. The new compounds compositions may be used either alone or in combination with at least one additional agent for the treatment of a Raf kinase mediated disorder, such as cancer.

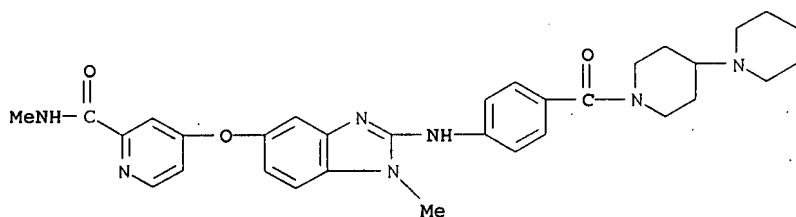
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 611220-90-7P 611221-14-8P

(preparation of substituted benzazoles as Raf kinase inhibitors)

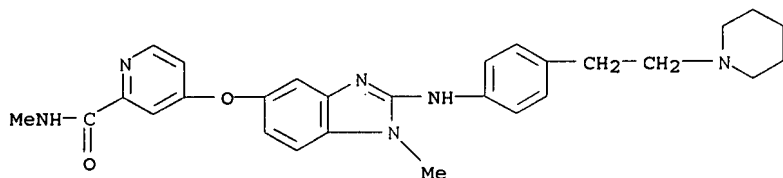
RN 611220-90-7 USPAT2

CN 2-Pyridinecarboxamide, 4-[[2-[[4-([1,4'-bipiperidin]-1'-ylcarbonyl)phenyl]amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl-(9CI) (CA INDEX NAME)



RN 611221-14-8 USPAT2

CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[[4-[2-(1-piperidinyl)ethyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



=> d his

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FILE 'HCAPLUS' ENTERED AT 17:41:17 ON 08 AUG 2007

L1 1 US20070066660/PN OR (US2006-577033 OR WO2004-EP11550 OR DE2003-

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FILE 'HCAPLUS' ENTERED AT 17:44:11 ON 08 AUG 2007

L2 TRA L1 1- RN : 52 TERMS

FILE 'REGISTRY' ENTERED AT 17:44:11 ON 08 AUG 2007

L3 52 SEA L2

L4 4 L3 AND C19H12CLF3N4O

L5 6 NCNC2-C6/ES AND NC5/ES AND 46.150.18/RID AND C19H12CLF3N4O

L6 2 L5 NOT L4

SAV TEM L4 J033ES/A

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L7 1 L4

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 L11 33 L10 AND L3

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L12 5 L10  
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 L14 4 L12 NOT L13

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L16 6 L10  
 L17 1 L16 AND L1  
 L18 5 L16 NOT L17

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FILE COVERS 1907 - 8 Aug 2007 VOL 147 ISS 7  
 FILE LAST UPDATED: 7 Aug 2007 (20070807/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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L7 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:409508 HCAPLUS  
 DN 142:463726  
 TI Preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors  
 IN Staehle, Wolfgang; Buchstaller, Hans-Peter; Jonczyk, Alfred; Rautenberg, Wilfried  
 PA Merck Patent G.m.b.H., Germany  
 SO PCT Int. Appl., 105 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

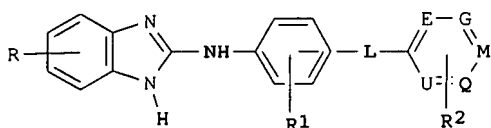
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
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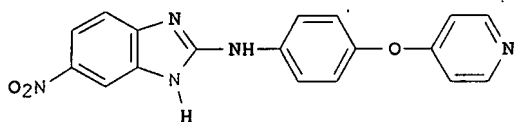
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

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JP2007509096	T	20070412	2006JP-0536006	20041014
MX2006PA04405	A	20060614	2006MX-PA04405	20060420
US2007066660	A1	20070322	2006US-0577033	20060424
IN2006KN01239	A	20070427	2006IN-KN01239	20060511

PRAI 2003DE-1049587 A 20031024  
 2004WO-EP11550 W 20041014  
 OS MARPAT 142:463726  
 GI



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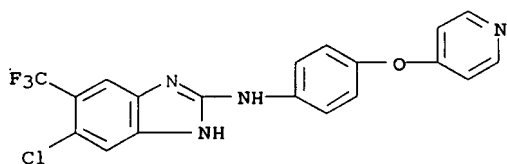


II

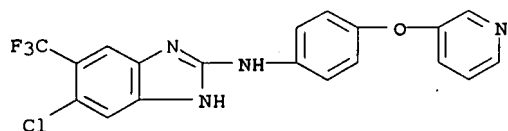
AB Title compds. I [R = (R1)m; R1 = (R1')p; R2 = (R2')q; m, p, q = 0-4; R1, R1' = Halo, OH, CN, etc.; L = CH2, CH2CH2, O, etc.; R2' = halo, OH, CO2H, etc.; E, G, M, Q, U = C or N atom with provisos] and their pharmaceutically acceptable salts and formulations were prepared For example, condensation of 4-(4-isothiocyanatophenoxy)pyridine and 4-nitro-1,2-phenylenediamine afforded claimed benzimidazol II. In TIE-2 tyrosine kinase inhibition assays, 3-examples of compds. I exhibited IC50 values ranging from 5-40 x 10<sup>-7</sup> mol/L. Compds. I are claimed to be useful as tyrosine kinase inhibitors in the treatment of tumors.

IT 851677-12-8P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-19-5P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine 851677-25-3P, (4-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-4-yloxy)phenyl]amine 851677-26-4P, (4-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl)[4-(pyridin-3-yloxy)phenyl]amine  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors)

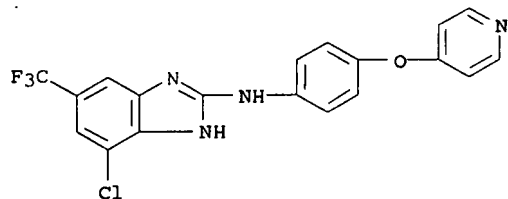
RN 851677-12-8 HCAPLUS  
 CN 1H-Benzimidazol-2-amine, 5-chloro-N-[4-(4-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



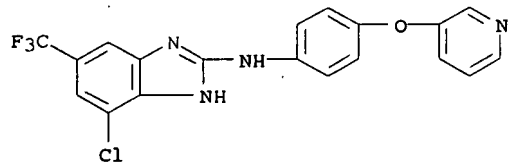
RN 851677-19-5 HCAPLUS  
 CN 1H-Benzimidazol-2-amine, 5-chloro-N-[4-(3-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 851677-25-3 HCAPLUS  
 CN 1H-Benzimidazol-2-amine, 4-chloro-N-[4-(4-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 851677-26-4 HCAPLUS  
 CN 1H-Benzimidazol-2-amine, 4-chloro-N-[4-(3-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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 CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 18:12:45 ON 08 AUG 2007  
 CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitstr l20

L20 ANSWER 1 OF 1 USPATFULL on STN  
 AN 2007:76306 USPATFULL  
 TI Benzimidazolyl derivatives  
 IN Stahle, Wolfgang, Ingelheim, GERMANY, FEDERAL REPUBLIC OF  
 Buchstaller, Hans-Peter, Griesheim, GERMANY, FEDERAL REPUBLIC OF  
 Jonczyk, Alfred, Darmstadt, GERMANY, FEDERAL REPUBLIC OF  
 Rautenberg, Wilfried, Reinheim, GERMANY, FEDERAL REPUBLIC OF  
 PA Merck Patent GmbH, DARMSTADT, GERMANY, FEDERAL REPUBLIC OF, 64293  
 (non-U.S. corporation)  
 PI US-20070066660 A1 20070322  
 AI 2004US-000577033 A1 20041014 (10)  
 2004WO-EP00011550 20041014  
 20060424 PCT 371 date  
 PRAI 2003DE-0010349587 20031024  
 DT Utility  
 FS APPLICATION  
 LREP HELLER EHRMAN LLP, 1717 RHODE ISLAND AVE, NW, WASHINGTON, DC,  
 20036-3001, US  
 CLMN Number of Claims: 36  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 2276

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

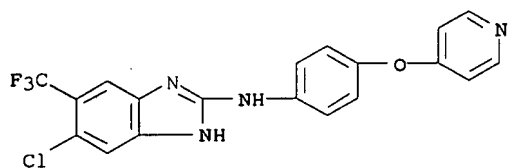
AB The invention relates to the novel compounds of formula (I) wherein R.sup.1, R.sup.1, L, E, G, M, Q, U, R.sup.2, m, p and q are defined as in claim 1. The novel compounds are tyrosinkinase inhibitors, especially TIE-2 inhibitors, and Raf kinase inhibitors and can be used in the treatment of tumors. ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 851677-12-8P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-19-5P, (5-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine 851677-25-3P, (4-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-4-yloxy)phenyl]amine 851677-26-4P, (4-Chloro-6-trifluoromethyl-1H-benzimidazol-2-yl) [4-(pyridin-3-yloxy)phenyl]amine (preparation of benzimidazolyls as TIE-2 tyrosine kinase inhibitors for the treatment of tumors)

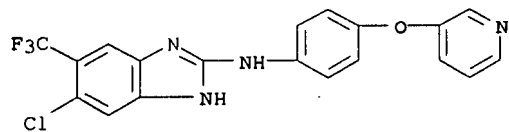
RN 851677-12-8 USPATFULL

CN 1H-Benzimidazol-2-amine, 5-chloro-N-[4-(4-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



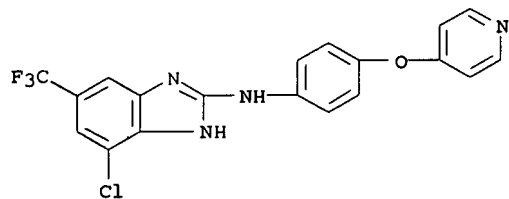
RN 851677-19-5 USPATFULL

CN 1H-Benzimidazol-2-amine, 5-chloro-N-[4-(3-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



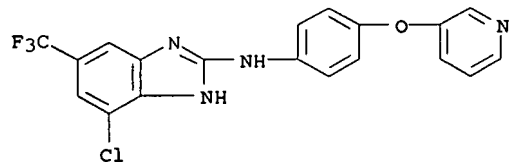
RN 851677-25-3 USPATFULL

CN 1H-Benzimidazol-2-amine, 4-chloro-N-[4-(4-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 851677-26-4 USPATFULL

CN 1H-Benzimidazol-2-amine, 4-chloro-N-[4-(3-pyridinyloxy)phenyl]-6-(trifluoromethyl)- (9CI) (CA INDEX NAME)



=> d his 119-

(FILE 'USPATFULL, USPAT2' ENTERED AT 18:03:53 ON 08 AUG 2007)

FILE 'HCAOLD' ENTERED AT 18:12:05 ON 08 AUG 2007

L19 0 L7

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L20 1 L4

FILE 'HCAPLUS' ENTERED AT 18:12:25 ON 08 AUG 2007

FILE 'USPATFULL, USPAT2' ENTERED AT 18:12:45 ON 08 AUG 2007

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